impacts to the historic boundary surrounding Worsham Mill, a National Eligible Property protected by the National Historic Preservation Act. Alternate 2 (New Alignment) is deemed "No Adverse Effect" and will be a DeMinimus, which makes it the required alternative from a Section 4(f) perspective.

NCDOT Division 7 and Federal Highway Administration (FHWA) concur with the selection of Alternative 2 as the preferred alternative.

## IV. ESTIMATED COSTS

The estimated costs, based on 2012 prices, are as follows:

	Alternative 1	Alternative 2 Preferred
Structure	\$ 622,000	\$ 622,000
Roadway Approaches	\$ 265,000	\$ 612,000
Structure Removal	\$ 54,000	\$ 54,000
Misc. & Mob.	\$ 222,000	\$ 378,000
Eng. & Contingencies	\$ 187,000	\$ 234,000
Total Construction Cost	\$ 1,350,000	\$ 1,900,000
Right-of-way Costs	\$ 39,000	\$ 45,000
Right-of-way Utility Costs	\$ 57,000	\$ 47,000
Total Project Cost	\$ 1,446,000	\$ 1,992,000

## V. NATURAL ENVIRONMENT

## **Physical Characteristics**

## **Water Resources**

Water resources in the study area are part of the Roanoke River basin (U.S. Geological Survey [USGS]) Hydrologic Unit 03010103. Three streams were identified in the study area. The physical characteristics of these streams are provided in the  $2^{nd}$  table below.

Water resources in the study area.

Stream Name	Map ID	DWQ Index Number	Best Usage Classification
Wolf Island Creek	Wolf Island Creek	22-48	С
UT Wolf Island Creek	SA	22-48	С
UT Wolf Island Creek	SB	22-48	С